

New report reinforces benefits of fuel switching to 'gas'

A new report which reinforces the various benefits of fuel switching to direct use of LPG and gas has prompted interest from Government officials.

The new study shows that increasing the direct use of LPG and gas instead of electricity could significantly reduce New Zealand's annual CO₂ output.

It shows that direct use of LPG and gas offers a better CO₂ outcome than almost any other energy source used for space and water heating and cooking.

The new study was commissioned by the Gas Association (GANZ) and supported by the LPGA. It was undertaken by the Centre for Advanced Engineering (CAENZ).

Released in May, it compares the CO₂, energy efficiency and cost impacts of LPG and gas appliances with alternatives in the residential, commercial and light industrial sectors.

It provides a full energy chain analysis, not just a comparison of end use appliance efficiencies.

"The research shows that direct use of LPG and gas is only bettered in CO₂ terms by the latest heat pumps and by wood and pellet burners used for heating and fuelled by truly renewable sources," said LPG Association president, Albert de Geest.

Government officials have been briefed on the CAENZ report and have indicated they are happy to

continue discussions about the issue.

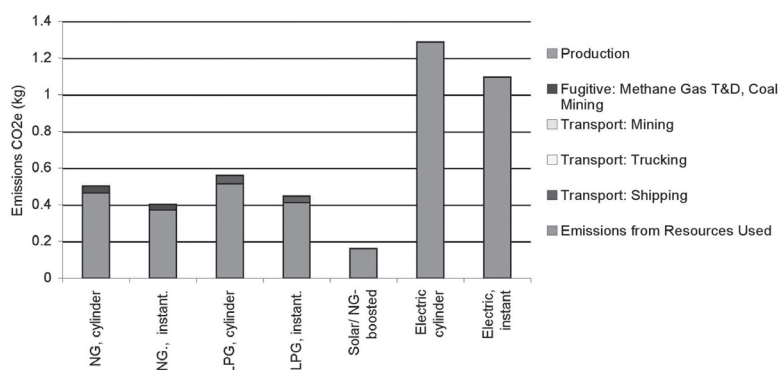
"We hope to work closely with officials to see where there may be opportunities to use direct use of LPG and gas to achieve CO₂ reductions," Albert said.

He said the CAENZ report

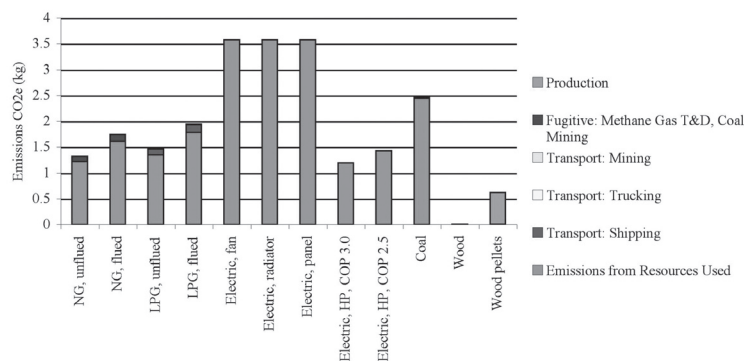
highlights quite clearly that fuel switching to LPG and gas offers considerable strategic advantages to New Zealand.

It also provides significant benefits to individuals because it is among the most cost-effective space heating, water heating and cooking energy sources.

Domestic hot water



Domestic dispersed space heating



LPG Association celebrates double GPS victory

The LPG industry can breathe a collective sigh of relief, following the Association's successful submission on the draft Gas Policy Statement (GPS).

The GPS, which was released in 2003, sets out the objectives and outcomes the Government wants the Gas Industry Company to pursue.

In October 2007, the Government decided to update the GPS on Gas Governance following the launch of the New Zealand Energy Strategy (NZES). Consulting on the draft GPS took place between 14 December 2007 and 15 February 2008.

Successful submission

The draft version instructed the Gas Industry Company to 'advise the Minister of Energy whether rules, regulations or industry arrangement recommended under Part 4A of the Gas Act 1992 should be extended to include liquid petroleum gas'.

LPG Association executive director, Peter Gilbert, says this came as something of a shock.

"The draft GPS really gave GIC open slather to look at the whole LPG industry."



Peter met with the MED and the GIC to discuss the draft and how it would be interpreted, given the very loose wording of the directive. As a result, the Association decided to make a submission on behalf of members.

The LPGA's submission noted that further rules, regulation and 'industry arrangement' were unnecessary for the LPG sector because adequate competition, consumer choice, safety precautions, governance and regulation are already in place.

"In our submission we advised that the LPG industry is not as complex as the gas industry, and is, in effect, largely self-regulating – there is no need for the GIC to be involved."

"We recommended that the GPS recognise the value of direct use of gas, whether it be reticulated or provided in tanks and cylinders."

Fortunately, the Minister of Energy agreed. When the final version of the GPS was released on 18 April 2008, the only instance in which LPG was mentioned was to ask the GIC to look at whether the Electricity and Gas Complaints Commission should be extended to include LPG.

In support of DUOG

In its submission the LPGA also expressed full support for the promotion of the direct use of gas to meet the objectives of the NZES.

"We recommended that the GPS recognise the value of direct use of gas, whether it be reticulated or provided in tanks and cylinders."

The submission pointed out that LPG's use in these applications now displaces approximately 1,945GWh of electricity generation annually, which makes it an increasingly valuable energy asset, particularly in light of the potential effects of the drought over the summer.

As a result of the submission, and of previous submissions to the NZES, the final version of the GPS asked the GIC to look into what the CO₂ benefits would be if the direct use of gas was increased.

"We fully support the GIC's work in this area and will work with them to help Government achieve its goals under the NZES, and to ensure a positive outcome for the industry."

International LPG prices

LPGA president and chief executive officer at Liquigas, Albert de Geest, looks at the current world trends in LPG pricing and their effects on the New Zealand market.



A question many have been asking is, what is happening to the price of LPG? Why has it gone up so much? The answer is that over the last two years or so the New Zealand LPG market has transitioned from fixed prices based on old historical contracts to a price referenced to the international price of LPG. This change in prices has largely been driven by the need to import up to half of our total requirements.

These prices will remain even after the Kupe field starts production in 2009, making New Zealand largely self-sufficient in LPG again. The developers of new fields are seeking prices referenced to international prices as is the case for most

commodities produced in New Zealand.

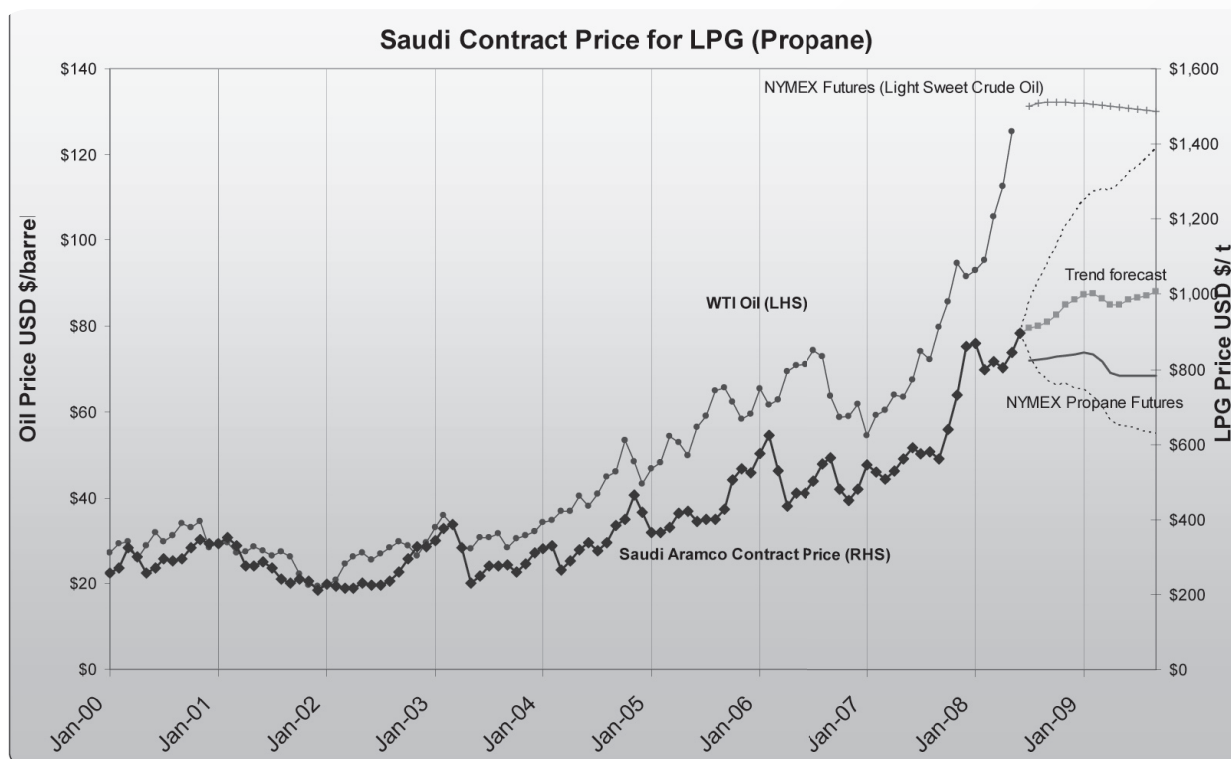
So what is happening to the international price of LPG? In previous years we have seen higher prices for LPG in our summer, due to high winter demand in Northern Hemisphere countries, and lower prices during our winter. Also, as is clear from the chart below, there is a strong relationship between the international prices of oil and LPG. In the last year this has overwhelmed any seasonal supply and demand effects.

From a low of around 500 US dollars per tonne in March 2007, the Saudi Aramco Contract Price (CP) has risen to 895 US dollars per tonne bringing

the landed price of LPG in New Zealand to around \$1,232 per tonne.

So, where to next? Over the next few years the world supply of LPG is expected to increase by up to 20%. Most of this increase will come as a by-product of increased production of LNG in the Middle East. The additional volume will almost double the volume of international (seaborne) trade in LPG and will need to compete in the market with other fuels and petrochemicals.

So while, unfortunately, the international LPG price will still be driven mostly by the price of oil, it should settle to a lower level relative to oil making LPG more competitive relative to other fuels.



THE 6TH ANNUAL GAS ENERGY SUMMIT 15 & 16 September 2008, Wellington

Albert de Geest, LPGA president, is one of the key industry representatives presenting at the 6th Annual Gas Industry Summit, organised by Conferenz. The programme will cover key regional issues and trends in the Gas sector, including the NZ ETS, the potential ban on new thermal electricity generation, Government Policy Statement (GPS) on Gas Governance, carbon capture and storage and gas trading markets. Participants will have the opportunity to hear from key industry representatives and Government leaders from New Zealand and Australia. The Summit is co-located with the 10th New Zealand Energy Summit - sharing sessions, breaks and open forums.

Register by phoning Conferenz on (09) 912 3616, email register@conferenz.co.nz or register online at www.conferenz.co.nz.

Government goes for natural gas and LPG

"Congratulations to EECA on its recognition of LPG as a clean, efficient energy source."

That's the message from LPGA executive director, Peter Gilbert, in response to the Energy Efficiency and Conservation Authority's (EECA) ENERGYWISE project, which offers funding to replace poor quality heating systems in homes.

In a recent development, the scheme has been extended, and now recommends flued gas space heating – both LPG and natural gas – as a clean heat option.

To help improve poor air quality in various regions of New Zealand, flued gas heaters are now being fitted in place of other domestic heating methods. They are offered as a clean heat option along with heat pumps, wood burners and pellet burners. The Government's scheme for insulation, clean heating and other energy efficiency measures has been made available through 11 partners across New Zealand.

Peter Gilbert said the ENERGYWISE scheme is the Government's first recognition of LPG as a clean energy source.

"This is long overdue and comes after an extensive and sustained

campaign by the LPGA for official recognition of the product."

The funding for cleaner heating options is available as either an interest subsidy, so homeowners can pay off the cost of energy efficiency improvements over time, and the Government will pay the interest; or a grant of 10 percent of the cost of insulation and clean heat, up to a maximum of \$500.

The Government announced in the 2007 Budget an allocation of \$23 million, over four years, to help home owners pay for energy efficiency improvements, including efficient heating upgrades.

Funding will be spread over four years.

"LPG not only reduces greenhouse gas emissions, but also cuts other harmful pollutants. It also reduces electricity consumption, which is particularly important given the fragility of our electricity generation and transmission systems," Peter said.

"With the cooler weather now upon us, we commend the Government's acknowledgement of LPG's environmental benefits, and its capacity to provide clean, efficient and effective space and water heating."



Industry practice guides well underway

A code of practice for the in-situ filling of LPG cylinders is in the final sign-off stage.

The code was developed as a means of bridging the gap created when the regulations were not transferred to HSNO regime from the Dangerous Goods Act.

The code, written by industry representatives, will go to ERMA New Zealand for final approval. Once signed off it will serve as an industry regulation.

"In creating its own approved code of practice, industry has provided a solution to the issues that not transferring the regulation may have caused," said LPG Association executive director, Peter Gilbert.

"It's a way of regulating something that's always been done in a way that's in the industry's best interest."

The Association is also working with industry to produce a best practice guide for multi cylinder installations.

The impetus to develop the guide came from the LPGA technical committee.

"Although a code of practice already exists for twin cylinder installations, the committee felt that the increased complexity involved in installing multi cylinders warranted its own guide," said Peter.

The guide, which is in its final draft stage, includes technical drawings and covers topics such as choosing materials and equipment, jointing, positioning, and liquid and vapour withdrawal.

"Liquid withdrawal is a more technically complex process, so the committee felt it was important that it be included."

Peter says the guides will be widely available to encourage as many people to use them as possible.

Leading car engineer calls for Aussies to use LPG

One of Australia's most renowned automotive engineers says the Federal Government should continue to encourage consumers to convert their vehicles auto LPG.

Dr Laurie Sparke said looming fuel supply issues and the potential for significant savings in greenhouse gas emissions make LPG the best alternative fuel option for Australia in the immediate future.

Dr Sparke, who was formerly the director of innovation at GM Holden, said encouraging more motorists to use LPG would reduce Australia's growing oil imports and also provide considerable environmental benefits.

The Federal Government's LPG Vehicle Scheme provides a \$1,000 grant to purchase a factory-built LPG vehicle or \$2,000 to convert an existing diesel or petrol vehicle to run on LPG.

Since the scheme was introduced in August 2006 an estimated 120,000 Australians have changed to LPG motoring.

Dr Sparke said tightening global oil supplies, increasing demand and falling domestic oil production means Australia faces a serious supply crunch within the next five years. He said LPG is the best alternative.



"Other fuel alternatives, such as the large-scale production of biofuels, will have unintended negative environmental effects.

"Ethanol will be limited to use as a low-percentage petrol extender in Australia because of the huge areas of land required for cultivation."

Dr Sparke said LPG is also the best alternative for short-haul trucks, many of which use old engine technology with poor emissions performance.

He said old cars are also excellent candidates for LPG conversion.

"In Victoria, for example, the average age of cars on the road is 11 years. Many use old engine technology and are poorly maintained."

"Simply mandating the replacement of old cars with new, more efficient ones would be inequitable and unaffordable - and the greenhouse emissions caused by making those cars would exacerbate an already critical greenhouse situation.

"Converting older vehicles in the national fleet to LPG is the better solution."

Source: LPG Australia

LPGA EXECUTIVE DIRECTOR, PETER GILBERT, NEW CHAIR OF NEW ZEALAND GAS SECTOR BOARD

Peter Gilbert has been made Chair of the New Zealand Gas Sector Board.

The Board, which is facilitated by Standards New Zealand, oversees a programme of work for the development and review of New Zealand Standards pertinent to Gas safety and specification.

As well as the LPGA, members of the New Zealand Gas Board include GANZ, the Plumbers, Gasfitters and Drainlayers' Board, the Gas Utilisation Institute, NZ Institute of Gas Engineers, Master Plumbers, Gasfitters & Drainlayers (NZ) Inc, the Institution of Gas Engineers, Local Government New Zealand and Energy Safety.

While Peter has been involved with the group for many years, this is his first term as chair.

"The New Zealand Gas Sector Board is a good example of industry and regulators working collectively," said Peter. "The group is cooperative, productive and works well together."



LPG endorsed on TV's Homesick

LPG has been hailed as an ideal energy saving option on prime time national television.

The first episode of TV2's Homesick, which renovates hazardous homes, featured the installation of an LPG-powered Rinnai heater because of its ability to "lower emissions and save energy."

The subjects of the first episode, the Tasker family moved to what they thought would be a perfect country home, but soon started to suffer from persistent, inexplicable health problems.

A thorough investigation found the house in Whitford, South Auckland, was a risk to the family's health.

As part of the programme's 'home safe' plan, the Homesick team installed a Rinnai Efficiency continuous flow hot water heater system and two 45kg LPG cylinders.

The programme said their team installed the system so water would only be heated as required and energy wouldn't be wasted.

Rinnai sales and marketing manager, David Waters, says Rinnai has donated a gas-powered appliance for every episode of Homesick.

"Gas has been portrayed very negatively in the media and this was a great opportunity to promote gas and LPG as energy sources to create a healthy home," says David

"As well as our Efficiency continuous flow water heaters, we also supplied three Rinnai Reflection gas fires to the Homesick series in an effort to demonstrate that gas is a better heating solution."

LPGA executive director, Peter Gilbert, is pleased with the outcome.

"This is a significant move forward in the media's recognition that LPG is a clean, cost-effective way to keep our homes safe and warm.

"We should continue to make every effort to raise the profile of LPG on the national stage."

Wairarapa considers Resource Management trigger limits

The LPG Association has made a submission to the Wairarapa Combined District Plan to raise residential trigger limits for LPG.

The three Wairarapa District Councils (Masterton, Carterton and South Wairarapa) have prepared the Combined District Plan, under the Resource Management Act.

The Plan is the primary document that manages the environmental effects of land use, development and subdivision in the Wairarapa. It contains policies and rules relating to developing or subdividing property, or setting up a new business, such as defining areas for residential or industrial activities.

The LPG Association presented its submission at a council hearing last month. As a result, the Commissioners have agreed with the proposal to increase the resource consent trigger limits to 300kg of LPG for residential areas.

COMMISSIONERS' DELIBERATIONS

The Commissioners concur with the Section 42A report that adding the quantity specification (e.g. tonnes or cubic metres) to the Table of Hazardous Facilities would assist Plan users in better understanding the Plan provisions. Therefore, the table is amended to include these specifications.

With respect to increasing the quantity of LPG storage on residential properties, the Commissioners accept that this would provide an alternative energy source for internal and water heating, and is consistent with national statutes and other industry standards. The Commissioners considered a 300kg limit would be appropriate so as to allow households to adopt a configuration of tank sizes that accommodate their needs. The Commissioners noted that the modern installation standards for LPG cylinders ensures they do not pose an unacceptable risk in the residential environment.

The Commissioners believe the existing plan provisions and incorporation of the consents matrix is the most efficient and effective method for controlling hazardous facilities as it is a simpler method than the HFSP.

"The decisions now have to wait any appeals, which we expect will be completed in the next few weeks," says LPGA executive director, Peter Gilbert.

"We are pleased with our submission and the hearing process. It's great to know people are listening and willing to apply common sense."